



## CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

<b>Purpose Permit number:</b>	CPS 8409/2
<b>Permit Holder:</b>	Atlas Iron Limited
<b>Duration of Permit:</b>	15 June 2019 to 31 January 2021

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

### PART I – CLEARING AUTHORISED

#### 1. Purpose for which clearing may be done

Clearing for the purposes of road upgrades, geotechnical and water investigations, and water infrastructure.

#### 2. Land on which clearing is to be done

Corunna Downs Road reserve (PIN 11734822)

Crown Reserve 13676

Crown Reserve 2906

Halse Road reserve (PIN 11412373)

Hillside - Marble Bar Road reserve (PINs 11734807, 11734808, 11734809, 11734810, 11734811, 11734814)

Limestone - Marble Bar Road reserve (PIN 11997584)

Lot 111 on Plan 238589 (Pastoral Lease N049987)

Lot 266 on Plan 213709 (Crown Reserve 33941)

Lot 350 on Plan 49438

Lot 85 on Plan 189228 (Crown Reserve 41179)

Unallocated Crown Land (PIN 1017726)

Unallocated Crown Land (PIN 1017731)

Unnamed Road reserve (PIN 11734489)

#### 3. Area of clearing

The Permit Holder must not clear more than 142 hectares of native vegetation within the area cross-hatched yellow on attached Plan 8409/2a.

#### 4. Application

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

### PART II – MANAGEMENT CONDITIONS

#### 5. Avoid, minimise and reduce the impacts and extent of clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- avoid the clearing of native vegetation;
- minimise the amount of native vegetation to be cleared; and
- reduce the impact of clearing on any environmental value.

## 6. Weed control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

## 7. Vegetation management - flora and fauna habitat

The Permit Holder shall not clear native vegetation within the area shaded red on attached Plan 8409/2b for the purpose of temporary construction areas, water infrastructure or extraction of borrow material, with the exception of minor access tracks to these areas.

## 8. Vegetation management - watercourse

The Permit Holder shall not clear the *riparian vegetation* of any *watercourse* or *wetland* within the area cross-hatched yellow on attached Plan 8409/2a for the purpose of temporary construction areas, water infrastructure or extraction of borrow material, with the exception of minor access tracks to these areas.

## 9. Flora management

The Permit Holder shall ensure that no clearing of native vegetation within 10 metres of *Swainsona thompsoniana* occurs.

## 10. Retain vegetative material and topsoil, and rehabilitation

The Permit Holder shall:

- (a) retain the vegetative material and topsoil removed by clearing authorised under this Permit and stockpile the vegetative material and topsoil in an area that has already been cleared.
- (b) by 31 January 2021, *revegetate* and *rehabilitate* the areas that are no longer required for the purpose for which they were cleared under this Permit by:
  - (i) re-shaping the surface of the land so that it is consistent with the surrounding 5 metres of uncleared land;
  - (ii) ripping the ground on the contour to remove soil compaction; and
  - (iii) laying the vegetative material and topsoil retained under Condition 10(a) on the cleared area.

## PART III - RECORD KEEPING AND REPORTING

### 11. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

- (a) In relation to the clearing of native vegetation authorised under this Permit:
  - (i) the species composition, structure and density of the cleared area;
  - (ii) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
  - (iii) the date that the area was cleared;
  - (iv) the size of the area cleared (in hectares);
  - (v) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 5 of the Permit; and
  - (vi) actions taken to minimise the risk of the introduction and spread of *weeds* in accordance with condition 6 of this Permit.
- (b) In relation to the revegetation and rehabilitation of areas pursuant to condition 10 of this Permit:
  - (i) the location of any areas revegetated and rehabilitated, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
  - (ii) a description of the revegetation and rehabilitation activities undertaken; and
  - (iii) the size of the area revegetated and rehabilitated (in hectares).

## 12. Reporting

- (a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
- (i) of records required under condition 11 of this Permit; and
  - (ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding calendar year.
- (b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar year, a written report confirming that no clearing under this permit has been carried out, must be provided to the CEO on or before 30 June of each year.
- (c) Prior to 31 January 2021, the Permit Holder must provide to the CEO a written report of records required under condition 11 of this Permit where these records have not already been provided under condition 12(a) of this Permit.

## DEFINITIONS

The following meanings are given to terms used in this Permit:

**fill** means material used to increase the ground level, or fill a hollow;

**mulch** means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

**rehabilitate/ed/ion** means actively managing an area containing native vegetation in order to improve the ecological function of that area;

**revegetate/ed/ion** means the re-establishment of a cover of local provenance native vegetation in an area using methods such as natural regeneration, direct seeding and/or planting, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area.


**riparian vegetation** has the meaning given to it in Regulation 3 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004;

**watercourse** has the meaning given to it in section 3 of the Rights in Water and Irrigation Act 1914; **wetland/s** means an area of seasonally, intermittently or permanently waterlogged or inundated land, whether natural or otherwise, and includes a lake, swamp, marsh, spring, dampland, tidal flat or estuary.

**weed/s** means any plant -

- (a) that is a declared pest under section 22 of the Biosecurity and Agriculture Management Act 2007; or
- (b) published in a Department of Parks and Wildlife Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.

**wetland/s** means an area of seasonally, intermittently or permanently waterlogged or inundated land, whether natural or otherwise, and includes a lake, swamp, marsh, spring, dampland, tidal flat or estuary.

 Ryan Mincham  
2019.06.14  
11:20:44 +08'00'

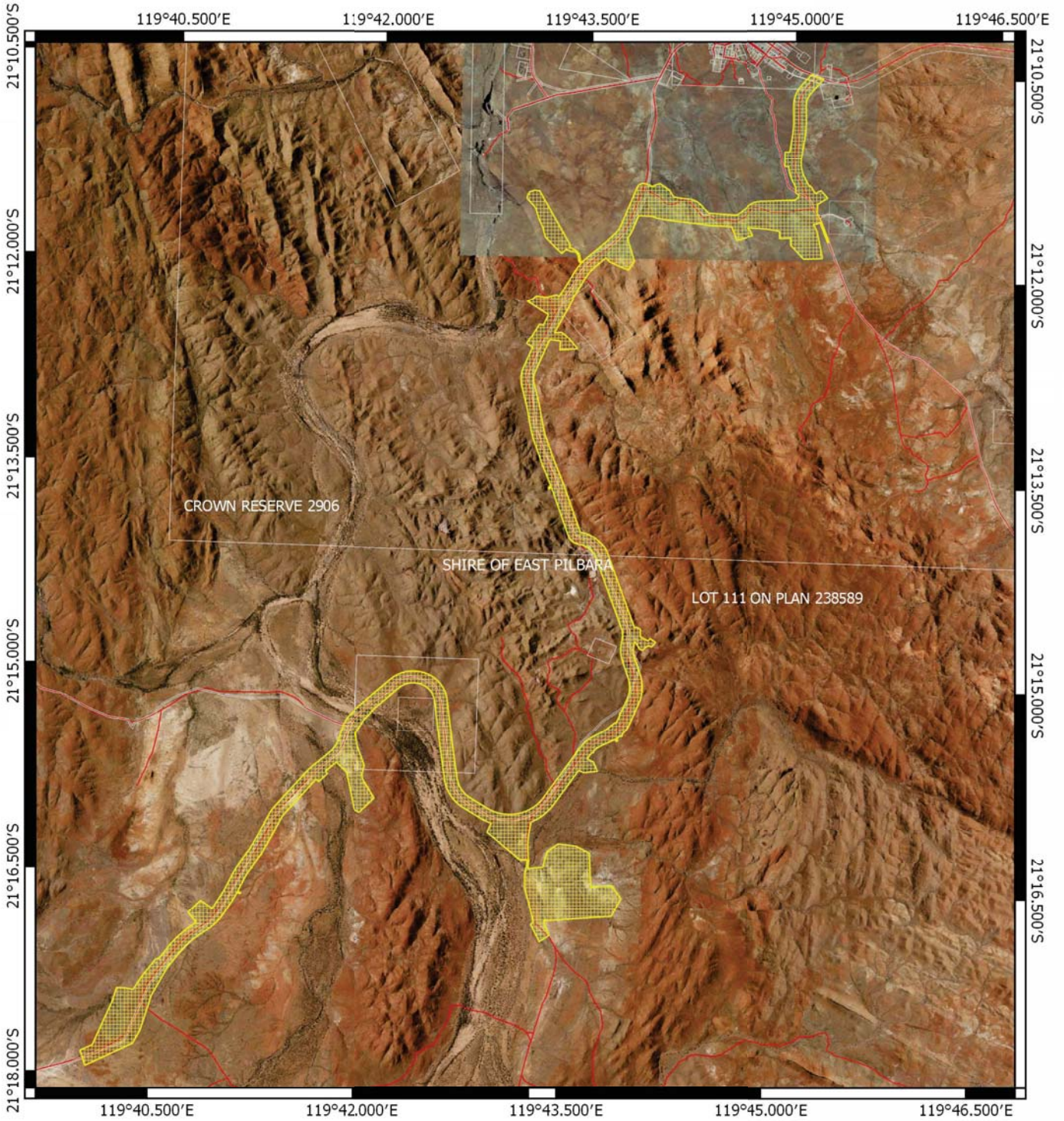
---

Ryan Mincham  
MANAGER  
NATIVE VEGETATION REGULATION

Officer delegated under Section 20  
of the *Environmental Protection Act 1986*

14 June 2019

# Plan 8409/2a



## Legend

-  CPS areas approved to clear
-  base layers
-  Cadastre
-  Road Centrelines
-  Local Government Authorities

Image



MGA 94  
Geocentric Datum of Australia 1994

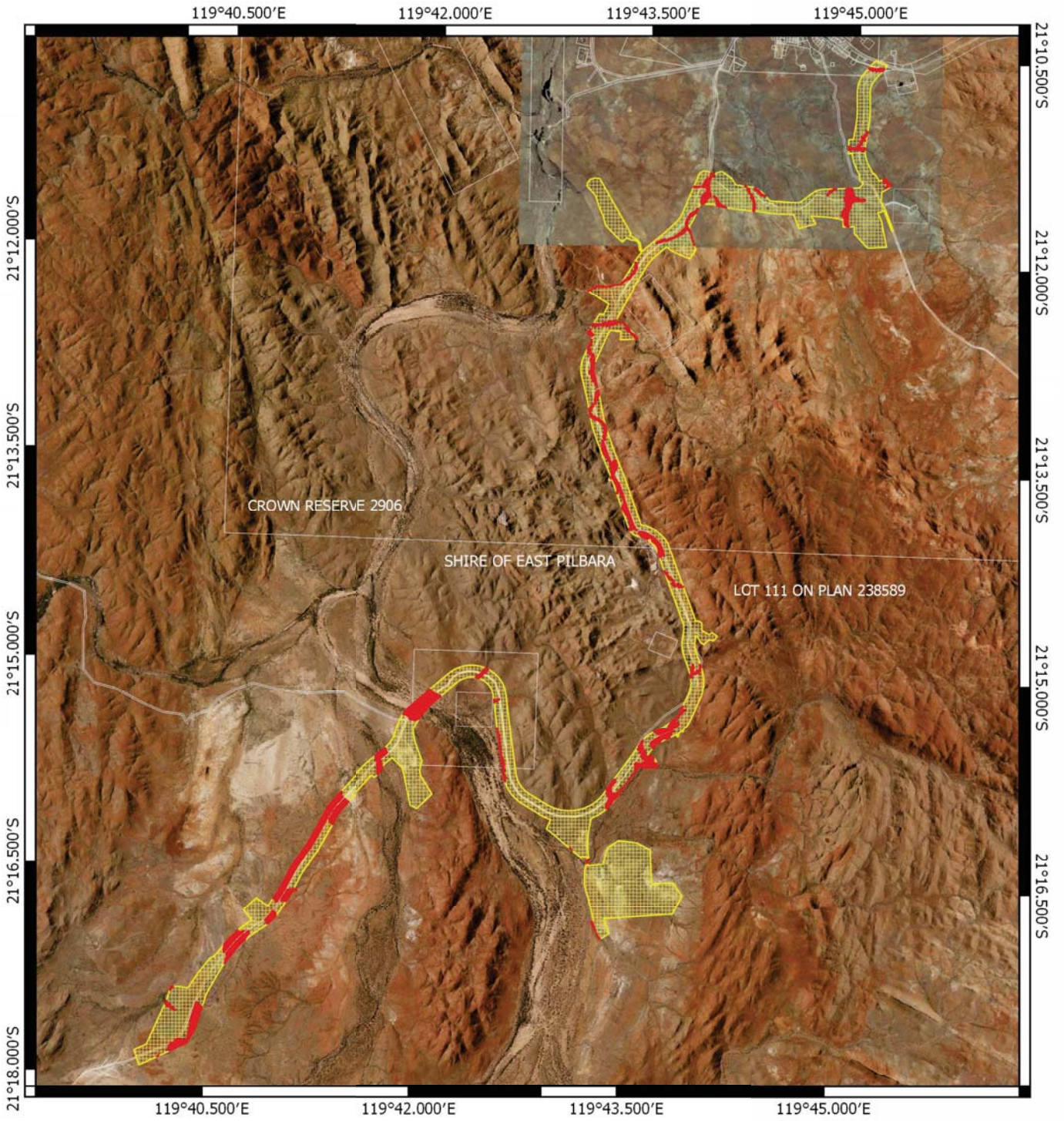
 Ryan Mincham  
2019.06.14  
11:22:31  
+08'00'

Officer delegated under Section 20 of the  
*Environmental Protection Act 1986*



GOVERNMENT OF  
WESTERN AUSTRALIA

# Plan 8409/2b



## Legend

- Areas subject to condition
- CPS areas approved to clear base layers
- Cadastre
- Local Government Authorities
- Image



MGA 94  
Geocentric Datum of Australia 1994

*R. Mincham*  
Ryan Mincham  
2019.06.14  
11:21:41 +08'00'

Officer delegated under Section 20 of the  
*Environmental Protection Act 1986*



GOVERNMENT OF  
WESTERN AUSTRALIA



## 1. Application details

### 1.1. Permit application details

Permit application No.: 8409/2  
Permit type: Purpose Permit

### 1.2. Applicant details

Applicant's name: Atlas Iron Limited  
Application received date: 10 June 2019

### 1.3. Property details

Property: Corunna Downs Road Reserve (PIN 11734822)  
Crown Reserve 13676  
Crown Reserve 2906  
Halse Road reserve (PIN 11412373),  
Hillside - Marble Bar Road Reserve (PINs 11734807, 11734808, 11734809, 11734810, 11734811, 11734814)  
Limestone - Marble Bar Road Reserve (PIN 11997584)  
Lot 111 on Plan 238589 (Pastoral Lease N049987)  
Lot 266 on Plan 213709 (Crown Reserve 33941)  
Lot 350 on Plan 49438  
Lot 85 on Plan 189228 (Crown Reserve 41179)  
Unallocated Crown Land (PIN 1017726)  
Unallocated Crown Land (PIN 1017731)  
Unnamed Road reserve (PIN 11734489)  
Local Government Authority: Shire of East Pilbara  
Localities: Marble Bar

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
142		Mechanical Removal	Road construction or upgrades

### 1.5. Decision on application

Decision on Permit Application: Granted  
Decision Date: 14 June 2019

## 2. Site Information

**Clearing Description:** Atlas Iron Limited (Atlas) proposes to clear up to 142 hectares of native vegetation within a footprint of 642.6 hectares for the purpose of road upgrades, geotechnical and water investigations, and water infrastructure. The application area is show in Figure 1.

**Vegetation Description** A total of five Beard vegetation associations are mapped within the application area:

- **82:** Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*;
- **93:** Hummock grasslands, shrub steppe; kanji over soft spinifex;
- **171:** Hummock grasslands, low tree steppe; snappy gum over soft spinifex and *Triodia brizoides*;
- **587:** Mosaic: Hummock grasslands, open low tree-steppe; snappy gum over *Triodia wiseana* / Hummock grasslands, shrub-steppe; kanji over *Triodia pungens*; and
- **619:** Medium woodland; river gum (*Eucalyptus camaldulensis*).

A Level 2 flora and vegetation survey was conducted by Woodman Environmental Consulting Pty Ltd (Woodman) in 2016 (Woodman, 2016). A total of 12 vegetation types (VT) were recorded within the application area, including:

- **VT1:** Mid sparse shrubland dominated by mixed *Acacia* species over low sparse shrubland of mixed species including *Acacia stellaticeps*, *Pluchea tetranthera* and *Eremophila latrobei* subsp. *glabra* over low hummock grassland dominated by *Triodia epactia* on grey to brown sand to clay loam with occasional granite outcropping, on stony plains, low hills or sandy dunes;
- **VT2:** Tall to mid open shrubland dominated by mixed *Acacia* species including *Acacia eriopoda* and *Acacia maitlandii* over low sparse shrubland of mixed species including *Acacia stellaticeps*, *Corchorus parviflorus* and *Corchorus laniflorus* over low hummock grassland dominated mainly by *Triodia epactia* on

red-brown sandy clay to clay loam, on granite outcrops to stony plains and drainage lines with exposed granite;

- **VT4:** Low Open Woodland usually dominated by *Corymbia hamersleyana* over Tall Sparse Shrubland dominated by mixed *Acacia* species including *Acacia trachycarpa* and *Acacia ancistrocarpa* with *Dichrostachys spicata* over Low Hummock Grassland dominated by species including *Triodia wiseana* and *Triodia epactia*, with *Eragrostis eriopoda* on brown sandy loams on plains and drainage lines;
- **VT5:** Mid Sparse Shrubland of mixed *Acacia* species usually dominated by *Acacia synchronicia* over Low Hummock Grassland dominated by various *Triodia* species including *Triodia epactia*, *Triodia wiseana* and *Triodia longiceps* on brown clay loams on stony plains and base of low hills;
- **VT6:** Tall hummock grassland dominated by *Triodia longiceps* with tall isolated shrubs of *Acacia synchronicia* on red or brown sandy to clay loams on stony plains, interspersed with low sparse forbland of mixed species including *Sida fibulifera*, *Rhynchosia minima*, *Tephrosia* sp. clay soils (S. van Leeuwen et al. PBS 0273), *Crotalaria dissitiflora* subsp. *benthamiana*, *Cullen graveolens* and *Eriachne flaccida* on brown cracking clay in clay pans;
- **VT7:** Tall sparse shrubland dominated by species including *Acacia bivenosa*, *Acacia synchronicia* and *Dichrostachys spicata* over mid hummock grassland dominated by *Triodia longiceps* over sparse tussock grassland and chenopod shrubland dominated by \**Cenchrus ciliaris* and *Sclerolaena hostilis* on brown clay loam on flats and in open depressions;
- **VT8:** Low isolated shrubs dominated by *Melaleuca glomerata* over mid hummock grassland dominated by *Triodia longiceps* over low mixed sedgeland, grassland and forbland of mixed species including *Schoenus falcatus*, *Trianthema cussackiana* and *Stemodia grossa* on white to brown clay to clayey sand with occasional calcrete and dolerite stones, at the head of drainage lines;
- **VT9:** Low open woodland to isolated trees to *Eucalyptus leucophloia* subsp. *leucophloia* and/or *Corymbia hamersleyana* over tall sparse shrubland of mixed species usually dominated by *Acacia orthocarpa*, *Acacia monticola*, *Acacia tumida* var. *pilbarensis* and *Grevillea wickhamii* over low shrubland to sparse shrubland of mixed species dominated by *Acacia ptychophylla*, *Acacia spondylophylla*, *Goodenia stobbsiana*, *Dampiera candicans* and *Ptilotus calostachyus* over low hummock grassland dominated by *Triodia epactia* and occasionally *Triodia brizoides* on red to brown clay loam usually over ironstone or metamorphosed granite outcropping;
- **VT11:** Low isolated trees of *Corymbia hamersleyana* over tall sparse shrubland dominated by *Acacia inaequilatera* and often *Grevillea pyramidalis* subsp. *leucadendron* over low sparse shrubland dominated by *Corchorus parviflorus*, *Indigofera monophylla* and *Senna glutinosa* subsp. *glutinosa* over low hummock grassland dominated by *Triodia wiseana* and/or *Triodia epactia* on red to brown clay loam often with dolerite or occasionally quartz or metamorphosed granite outcropping, on low hills, ridges and occasionally undulating plains;
- **VT12:** Low open woodland of *Corymbia hamersleyana* over mid sparse shrubland dominated by *Acacia bivenosa* over low sparse shrubland of mixed species including *Corchorus parviflorus*, *Heliotropium cunninghamii*, *Indigofera monophylla* and *Pluchea ferdinandi-muelleri* over low hummock grassland dominated by *Triodia wiseana* and/or *Triodia angusta* or *Triodia longiceps* on brown clay loam on stony undulating plains and low rises often with calcrete outcropping;
- **VT14:** Mid open woodland of mixed species including *Eucalyptus victrix* and *Corymbia hamersleyana* over tall open to sparse shrubland of mixed species including *Acacia coriacea* subsp. *pendens*, *Acacia trachycarpa*, *Acacia pyrifolia* var. *pyrifolia*, *Acacia tumida* var. *pilbarensis* and *Melaleuca glomerata* over low sparse shrubland of mixed species including *Pluchea ferdinandi-muelleri*, *Cajanus pubescens* and *Stemodia grossa* over mid open grassland and sedgeland of mixed species dominated by \**Cenchrus ciliaris*, *Triodia longiceps*, *Triodia epactia*, *Chrysopogon fallax* and *Cyperus vaginatus* on red to brown sand to sandy loam with river stones in minor to medium drainage lines; and
- **VT15:** Mid open forest to woodland dominated by *Eucalyptus camaldulensis* subsp. *refulgens* and occasionally *Eucalyptus victrix* over tall open shrubland dominated by species including *Acacia ampliceps*, *Melaleuca glomerata* and *Acacia pyrifolia* var. *pyrifolia* over mixed mid open grassland and sedgeland dominated by \**Cenchrus ciliaris*, *Cyperus vaginatus* and *Triodia longiceps* on red to brown sandy to clay loam with river stone in major drainage lines.

\*denotes a weed species.

**Vegetation Condition**

Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994);

To:

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

**Soil Type**

The application area is mapped within the Rocklea, Capricorn, River, Macroy and Satirist Rangeland Land Systems (van Vreeswyk et al., 2004).

**Comments**

Vegetation condition within the application area was determined during the flora and vegetation survey by adapting Keighery (1994) for the Pilbara Biological Survey (McKenzie et al., 2009; Woodman, 2016). Vegetation condition has been converted to the Keighery scale for the purpose of this assessment.

The majority of the application area is in excellent (Keighery, 1994) condition (Woodman, 2016). Approximately 72 hectares within the application area has been previously cleared (Woodman, 2017).

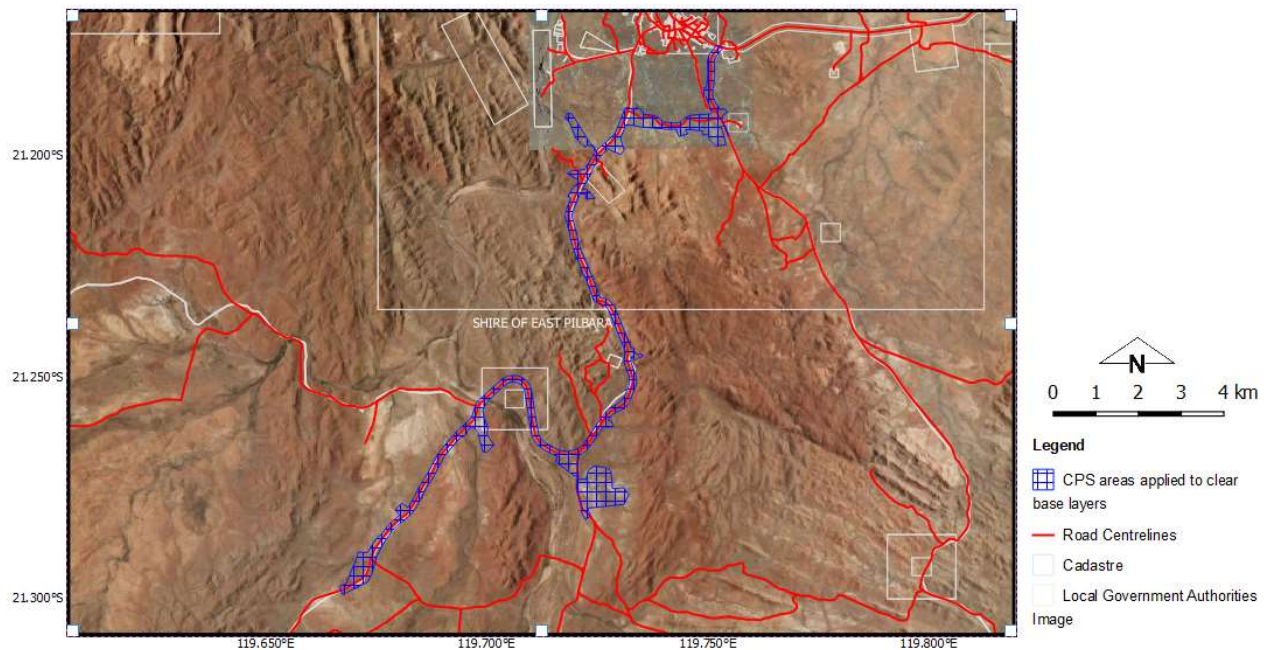


Figure 1: Application area (cross-hatched blue)

### 3. Assessment of application against clearing principles and planning instruments and other matters

Clearing Permit CPS 8409/1 has been amended to correct an error in wording of condition 7 and 8. Therefore, the assessment against the clearing principles has not changed and can be found in Clearing Permit Decision Report CPS 8409/1.

### 4. References

- Keighery, B.J. (1994). Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- McKenzie, N.L., van Leeuwen, S. and Pinder, A.M. (2009). Introduction to the Pilbara Biodiversity Survey, 2002-2007. Records of the Western Australian Museum, Supplement 78: 3–89.
- Van Vreeswyk, A. M. E., Payne, A. L., Leighton, K. A. and Hennig, P. (2004). An Inventory and Condition Survey of the Pilbara Region, Western Australia Department of Agriculture, Technical Bulletin No. 92, Perth, Western Australia.
- Woodman Environmental Consulting Pty Ltd (Woodman) (2016). Corunna Downs Project Level 2 Flora and Vegetation Assessment. Unpublished report prepared by Woodman Environmental for Atlas Iron Limited (DWER Ref: A1770859).
- Woodman Environmental Consulting Pty Ltd (Woodman) (2017). Corunna Downs Project, Hillside-Marble Bar Public Road Upgrade, Flora and Vegetation Impact Assessment. Unpublished report prepared by Woodman Environmental for Atlas Iron Limited (DWER Ref: A1363151).